JOURNAL OF
Neurobiology

Volume Contents

Vol. 34, No. 1, January 1998

Effects of Facial Nerve Injury on Mouse Motoneurons Lacking the p75 Low-Affinity Neurotrophin Receptor / 1
Catharine C. Ferri, Fraser A. Moore, and Mark A. Bisby

A Minimal Human MBP Promoter-*lacZ* Transgene Is Appropriately Regulated in Developing Brain and after Optic Enucleation, But Not in Shiverer Mutant Mice / 10
Lawrence Wrabetz, Carla Taveggia, Maria Laura Feltri, Angelo Quattrini, Raj Awatramani, Steven S. Scherer, Albee Messing, and John Kamholz

Bilateral Feedback Projections to the Forebrain in the Premotor Network for Singing in Zebra Finches / 27
G. F. Striedter and E. T. Vu

Chondroitin Sulfate Proteoglycan with Neurite-Inhibiting Activity Is Up-regulated following Peripheral Nerve Injury / 41
Jian Zuo, Yosbani J. Hernandez, and David Muir

Target Tissues Affect Cellular Properties of Cocultured Leech Retzius Neurons / 55
Kathleen A. French, Joyce A. Murphy, and Lidia Szczupak

Seasonal Plasticity of the Song Control System in Wild Nuttall's White-Crowned Sparrows / 69
Eliot A. Brenowitz, Luis F. Baptista, Karin Lent, and John C. Wingfield

Serotonin-Sensitive Leakage Channel in *Drosophila* Central Neurons / 83
Nicholas J. D. Wright and Yi Zhong

Cover: A coronal section of brain at the level of optic chiasm from a 15-day-old mouse containing a 750 nucleotide MBP promoter-*lacZ* transgene. The section was stained for β-galactosidase expression by Xgal histochemistry. Note that blue staining is visible in many heavily myelinated structures including the olfactory tracts, optic chiasm, internal capsule, corpus callosum, and anterior commissure. See Wrabetz et al., pp. 10–26, this issue.

Vol. 34, No. 2, February 5, 1998

Development of a Topographically Organized Auditory Network in Slice Culture Is Calcium Dependent / 97
Christian Lohmann, Vesna Ilic, and Eckhard Friauf

Development of Glutamate-Induced Intracellular Ca^{2+} Rise in the Embryonic Chick Retina / 113
Miho Sugioka, Yutaka Fukuda, and Masayuki Yamashita

Requirement of the MASH-1 Transcription Factor for Neuroendocrine Differentiation of Thyroid C Cells / 126
Thomas M. Lanigan, Shannon K. DeRaad, and Andrew F. Russo

Mouse Brain Potassium Channel β1 Subunit mRNA: Cloning and Distribution during Development / 135
Donna M. Butler, Joyce K. Ono, Tammy Chang, Richard E. McCaman, and Michael E. Barish

Pet-1, a Novel ETS Domain Factor That Can Activate Neuronal nAchR Gene Transcription / 151
Dmitry Fyodorov, Tom Nelson, and Evan Deneris

Differential Regulation of Levels of Nicotinic Receptor Subunit Transcripts in Adult Sympathetic Neurons after Axotomy / 164
Yuefang Zhou, Evan Deneris, and Richard E. Zigmond

Autonomous Regulation of Growth Cone Filopodia / 179
Vincent Rehder and Su Cheng

Cover: Topographic projection in an organotypic slice culture from the rat auditory brainstem. Superimposed drawings from three retrograde tracing experiments with biocytin are coded in red, blue, and yellow. A photomicrograph from a retrograde labeling experiment showing Dil-labeled neurons (orange) in the right part and DiA-labeled neurons (green) in the left part of the MNTB. Dil and DiA had been applied to the right and left part of the LSO, respectively. The LSO is the major target nucleus of the glycinergic MNTB neurons. See Lohmann et al., pages 97–112, this issue.

Vol. 34, No. 3, February 15, 1998

Growth Pattern and NGF-Dependent Survival of Dorsal Root Ganglia Neurons of Distinct Glyco-Phenotype / 193
Astrid Zimmermann

The NO/cGMP Pathway and the Development of Neural Networks in Postembryonic Lobsters / 208
Nathaniel L. Scholz, Ernest S. Chang, Katherine Graubard, and James W. Truman

Characterization of Tactile-Sensitive Interneurons in the Abdominal Ganglia of the Cockroach, *Periplaneta americana* / 227
Roy E. Ritzmann and Alan J. Pollack

Cell Death in the Sexually Dimorphic Dorsal Preoptic Area/Anterior Hypothalamus of Perinatal Male and Female Ferrets / 242
Joong-Jean Park, Stuart A. Tobet, and Michael J. Baum

Identification of a Broad Complex-Regulated Enhancer in the Developing Visual System of *Drosophila* / 253
Enchi Liu and Linda L. Restifo

Differential Expression of Extracellular Matrix and Cell Adhesion Molecules in the Olfactory Nerve and Glomerular Layers of Adult Rats / 271
Karl W. Kafitz and Charles A. Greer

Overexpression of Ciliary Neurotrophic Factor *In Vivo* Rescues Chick Ciliary Ganglion Neurons from Cell Death / 283
Tom P. Finn, Songte Kim, and Rae Nishi

Cover: Localization of ectopic reporter gene expression in the larval *Drosophila* visual system of a *Broad Complex* (*BRC*) null mutant. Single optical section, lateral view (anterior to the right), showing incoming photoreceptor terminals labeled with anti-HRP antisera (green). The dorsal half of the arc of lamina precursor cells, in which the H217 enhancer is normally repressed by BRC-Z2 transcription factors, is labeled by anti-βgal immunostaining (red). See Liu and Restifo, pages 253–270, this issue.

Vol. 34, No. 4, March 1998

Cell Proliferation in a Peripheral Target Is Required for the Induction of Central Neurogenesis in the Leech / 295
Thomas S. Becker, Gerald Bothe, Alexis R. Harley, and Eduardo R. Macagno

Islet Injury Induces Neurotrophin Expression in Pancreatic Cells and Reactive Gliosis of Peri-Islet Schwann Cells / 304
G. Teitelman, Y. Guz, S. Ivkovic, and M. Ehrlich

Identification and Characterization of *tenp*, a Gene Transiently Expressed before Overt Cell Differentiation during Neurogenesis / 319
Run-Tao Yan and Shu-Zhen Wang

Changes in Catecholamine Levels and Turnover Rates in Hypothalamic, Vocal Control, and Auditory Nuclei in Male Zebra Finches during Development / 329
Cheryl F. Harding, Sharon R. Barclay, and Susanna A. Waterman

Sympathetic Axons Surround Nerve Growth Factor–Immunoreactive Trigeminal Neurons: Observations in Mice Overexpressing Nerve Growth Factor / 347
Gregory S. Walsh and Michael D. Kawaja

Early Development of an Identified Serotonergic Neuron in *Helisoma trivolvis* Embryos: Serotonin Expression, De-Expression, and Uptake / 361
Thomas J. Diefenbach, Ron Koss, and Jeffrey I. Goldberg

An Enhanced Olfactory Marker Protein Immunoreactivity in Individual Olfactory Receptor Neurons Following Olfactory Bulbectomy May Be Related to Increased Neurogenesis / 377
Virginia McMillan Carr, Eric Walters, Frank L. Margolis, and Albert I. Farbman

Author Index to Volume 34 / 393

Subject Index to Volume 34 / 395

Volume Contents / I

Cover: Photomicrograph showing part of the clitellar region of a dissected leech embryo (anterior up). The anlagen of the male genitalia can be seen between two ganglia of the ventral nerve cord, while the anlagen of the female genitalia can be seen below the more posterior ganglion. The male, but not the female, genitalia produce a mitogenic signal that induces a unique population of central neurons in these two ganglia. Evidence that cell division in the male target organ is necessary for the induction of central mitogenesis is presented in the article by Becker et al., pp. 295–303 this issue. The preparation was double-stained with a monoclonal antibody (kindly provided by Dr. Birgit Zipser) that labels muscle fibers (blue) and with an antibody to serotonin (kindly provided by Dr. Robert Elde). The red component was overexposed purposely to visualize the nervous system and sex organs.